



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,975	12/11/2003	Robert H. Heil	PD-03W019	1330
7590 John E. Gunther Raytheon Company (E1/E150) P.O. Box 902 El Segundo, CA 90245-0902			EXAMINER CORRIELUS, JEAN B	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,975	<b>Applicant(s)</b> HEIL, ROBERT H.	
	<b>Examiner</b> Jean B. Corrielus	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 9-14 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. This application does not repeat any portion of prior Application No. 09/965,759, filed 9/28/01, and includes disclosure totally different than the prior application. In addition, this application does not include any inventors common with the prior application. Accordingly, this application does not constitute a continuation-in-part of the prior application. The benefit of the filing date of the prior application is denied (MPEP 35 U.S.C. 120 and 37 CFR 1.78).

### ***Claim Objections***

2. Claim 13 recites "a fourth mechanism" however, there is no limitation to first, second and third mechanisms. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17, line 5, the limitation "said second means" lacks of proper antecedent basis.

### ***Claim Rejections - 35 USC § 102***

Art Unit: 2611

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cordell et al US patent no. 6,169,887.

As per claim 9, Cordell teaches a secure receiver system fig. 2 comprising: antenna 111 functionally equivalent to the claimed "first means" for receiving a signal and providing a received signal in response thereto; delay 203 and 205 functionally equivalent to the claimed "second means" for delaying said received signal by a predetermined interval and providing a delayed signal in response thereto; and circuit 201 functionally equivalent to the claimed "third means" for decoding said delayed signal via a spreading (decoding) sequence generated by said circuit 201 (third means ) see output of 213 and providing a decoded signal in response thereto see output of 211. As per claim 10, Cordell teaches that the second means includes a "delay buffer" 203 and 205 see fig. 2.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2611

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cordell US patent No. 6,169,887.

As applied to claim 9 above, Cordell teaches every feature of the claimed invention but does not explicitly teach that the delay amount is at least 0.5 seconds. However, it would have been obvious to one skill in the art to set the delay to at least 0.5 seconds so as to be consistent with design parameters that would have required compensation for such a delay value so that signal detection can be enhanced.

As per claim 12, Cordell does not explicitly teach that the predetermined interval is greater than or equal to a search window employed by said receiver. However, it would have been obvious to one skill in the art to set the predetermined interval at a value greater than or equal to a search window employed in the receiver in order to allow sufficient time for the search window to perform its search on a previous signal prior to receiving the current signal.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cordell US patent No. 6,169,887 in view of Hayakawa US patent No. 6,738,412.

As applied to claim 9 above, Cordell teaches every feature of the claimed invention but does not explicitly teach that said third means is in communication with a receiver clock, said receiver clock including a fourth mechanism for allowing said receiver clock to only be set via information contained in said received signal. Hayakawa teaches a despreader 31 considered as the claimed "third means" is in communication with a receiver clock 36a, said receiver clock 36a including a circuitry (fourth mechanism) for allowing said receiver clock to only be set via information contained in said received

Art Unit: 2611

signal see fig. 1. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Cordell in order to provide proper timing to the receiver so that operation of the receiver can be controlled in such a way as to facilitate reconstruction of the original signal.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cordell US patent No. 6,169,887 in view of Hayakawa US patent No. 6,738,412 and further in view of Neufeld US patent No. 6,628,675.

As applied to claim 13 above, Cordell and Hayakawa teach every feature of the claimed invention but do not explicitly teach that said third means includes means for tracking an earliest received signal. Neufeld teaches a means for tracking the earliest signal see col. 7, lines 25-32. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Cordell and Hayakawa so as to align the receiver properly for reception of messages in its assigned time slot see Neufeld col. 11, lines 19-26.

***Allowable Subject Matter***

10. Claims 1-8, 15 and 16 are allowed.


11. Claim 17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Art Unit: 2611

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jean B. Corrielus  
Primary Examiner  
Art Unit 2611

V-44-07